

# Solar Powered Driver Feedback Signs GR33 Series



Available in a wide range of formats, GR33 Series Signs are proven to slow traffic down by providing drivers realtime responses.

Solar or Mains Powered  
with Optional Data Access

## Key Features

- **Displays speed and text**
- **GR33L model** Amber LED's
- **GR33CL model** Colour LED's (Green/Yellow/Red) with full data collection capability
- **Flashes if speed threshold is exceeded**
- **Adjustable min and max speed thresholds**
- **Individual bitmaps can be used** such as text messages, smiling/frowning faces, speed limits or logos.
- **Time controlled activation**
- **Automatic brightness adjustment**
- **Bluetooth operation/configuration**
- **Solar or mains power operation**
- **Remote operation/data transfer option available**
- **Long life reliability** virtually maintenance free
- **Full installation service available** countrywide

## Details

Radar-driven Driver Feedback Signs are proven to slow traffic down - permanently. This is due to the signs ability to alert drivers with responsive messages, which react to their actual speed. GR33 series signs are dot-matrix LED speed displays that show approaching vehicles speeds, as well as simple text messages and customised bitmaps .

Different message can be be displayed at different times of the day and this can be very useful for use outside schools or during rush hour traffic. The GR33CL model displays in different colour LED's (Green, Yellow and Flashing Red) and features vehicle data collection as standard - time & date, actual speed, average & max speed, speed reduction achieved, 85th Percentile. All of this in a compact enclosure that can be integrated into a wide range of different sign faces, designed to suit the specific location.

Options are available to allow the data to be remotely accessed - via a dedicated website, or by e-mailed data reports.



## Signage Variations



GR33CL Signs **700mm x 1310mm**  
600mm Dia. Speed Limit Roundel



GR33CL Signs – White Reflective  
Background **660mm x 1030mm**  
- with 450mm Dia. Speed Limit  
Roundel



GR33CL Sign – Slow  
Down **660 x 1030mm**



GR33CL Signs **850 x 1595mm** - with  
W134 Slippery Surface



GR33CL Signs **850mm x 1455mm**  
- with 600mm W140 Pedestrian  
Warning Sign



W001 Crossroads **850x1500mm** Go Mall/SLOW  
**850x1500mm** W141 School Ahead  
**850x1500mm**



GR33CL Signs with Yellow Reflective Panel – MIND  
OUR CHILDREN - Size: **660mm x 1030mm**



GR33CL Sign **700mm x 1455mm** with W002R  
600mm Dia. and text  
TURN AHEAD



W141 School Ahead  
**850x1730mm** with  
LED amber flashing  
beacons



GR33CL Sign **700mm x 2250mm** W002R Diamond  
with 600mm Dia. Speed  
Limit Roundel



GR33CL Sign – Standard Format **660mm x 720mm** i.e. not  
integrated into bigger reflective road traffic sign



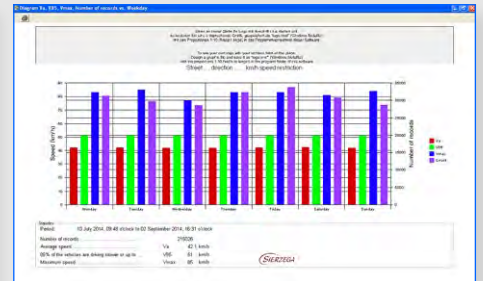
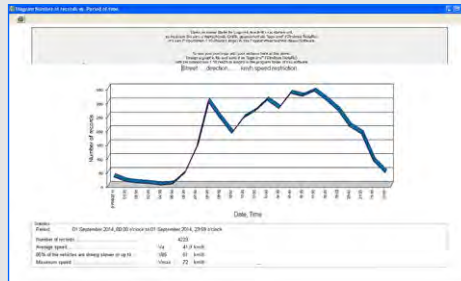
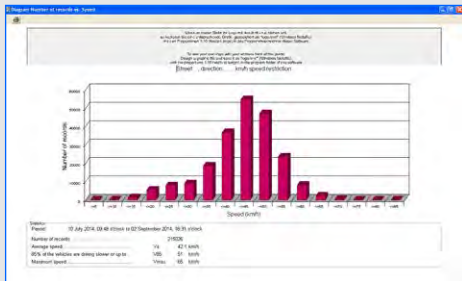
RUS043 50km/h Amber  
**700x1310mm**



W040 Stop Ahead  
**850 x 1500mm**

## Data Collection (GR33CL model)

The sign's in-built radar captures and stores data on all detected vehicles - date, time, V1 speed (speed at initial detection) and V2 speed (speed passing the sign). This data can be analysed using GRS5.2 software supplied with the sign to provide useful statistics on driver behaviour as well as monitoring the effect the Driver Feedback Sign is having on reducing vehicle speeds. A Remote Data option via a website is available as well.



## Technical Specifications

### Electrical Data

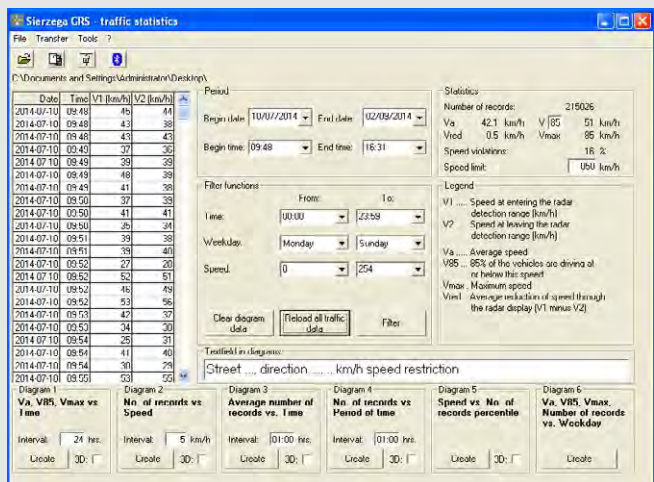
Input Voltage **12V**  
 Power Consumption - Radar On, LED's Off **<0.1W**  
 Display Active (speed value) **<1W**  
 Peak (all LED's active) **4W**

### Radar Sensor

Operating Frequency **K-band (24 Ghz)**  
 Transmitting Power **5 mW**  
 Certification Operating **FCC, IC, CE Approved 2 -199 km/h or**  
**2 - 150 mph**  
 Detection Range **min 100m, typ 150m Truck/HGV typ. 300m**  
 Accuracy **+/- 3%**

### Mechanical Data

LED Matrix Display **440mm x 340mm**  
 Weight **4 kgs**  
 Enclosure **ASA Plastic**  
 Protection Rating **IP67**  
 Front Plate Sheeting **Reflective EN12899 CR2**  
 Front Window **Lexan, anti-glare coating**  
 Operating Temp Range **-25 to 60 degrees C.**  
 Sign Mounting **76mm - 114mm dia pole**  
 Sign surround **Bespoke, to suit location**  
 Data Download **Bluetooth or via RC1 Remote Data Option**  
 Data Storage **>200,000 Locally**



### LEDs

Brand  
 Colour  
 Viewing Angle

**High-Performance Osram "Black Series"**  
**Yellow, Green, Red**  
**>120 degrees**

### Display

Resolution  
 Pixel Grid  
 Digit Size  
 Reading Distance  
 Update Rate  
 Display Brightness  
 Bitmap Memory

**16 x 18 Pixels**  
**20mm**  
**305mm**  
**approx. 150m**  
**1 sec, adjustable**  
**Automatic**  
**250 images**

